

REMARKS

Claims 1-20 have been cancelled.

New Claims 21-38 are now pending.

The new claims 21-38 are herewith submitted in order to distinctly claim a specific embodiment of the present invention. This specific embodiment is directed to a method for injecting oxygen-containing gas underground to provide sufficient oxygen level in an aquifer to maintain bacteria present in the aquifer for the biostimulation of bacteria for remediation of contaminants in the aquifers.

The support for the present claims can be found on page 1, line 21, which recites "the invention relates to. . . a method of . . . bacterial stimulation in the subsurface, and an oxygen delivery system for the remediation of aquifers...."

Biostimulation is a technical term of art and is defined as:

"Biostimulation: The use of nutrients or substrates to stimulate the "naturally occurring organisms" that can perform bioremediation. Fertilizer and growth supplements are the common stimulant "See Bioremediation: Pancea or fad? at page 3, <http://www.accessexcellence.org/LC/ST/st3bg.html>, a copy thereof is attached hereto.

"Biostimulation: Addition of nutrients, oxygen, or other electron donors and acceptors to increase microbial activity and biodegradation." See Environmental Assessment for Selection and Operation of the Proposed Field Research Centers, March 7, 2000, Glossary, at page 2. A copy of the article is attached hereto and can be found at http://www.ibi.gov/NABIR/fieldresearch/frc/ea/ea_12_0.html.

The support of the present claims can further be found at page 8, lines 12-13 of the present specification, which recites "FIG. 2 is a plan view drawing of an embodiment of this invention." FIG. 2 depicts an oxygen-containing gas delivery system suitable for carrying out the method for delivering oxygen in the manner as presently claimed.

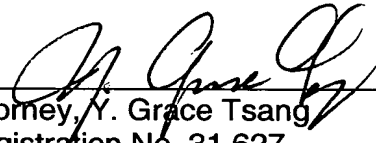
Further supports can be found at page 10, second paragraph, through page 18, which recites the method of using a network of oxygen delivery wells to maximize aerobic biodegradation.

Applicants submit that claims 21-38 are patentable over prior art and one skilled in the art could not have derived from prior art the present advantageous biostimulation process which provides adequate oxygenation with optimum gas distribution in an aquifer for maintaining bacteria for bioremediation without significant loss of contaminant(s) from volatilization.

In view of foregoing, claims 21-38 are patentable and the early notice of allowance is now most respectfully requested.

Respectfully submitted,

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Attachments:

- 1) Environmental Assessment for Selection and Operation of the Proposed Field Research Centers, March 7, 2000.
- 2) Bioremediation: Pancea or fad? SciTalk Bioremediation Background